A NEW RHINACLOA AND THREE NEW SPECIES OF LEPIDOPSALLUS (Hemiptera, Miridae).¹

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Rhinacloa subpallicornis n. sp.

Distinguished from *forticornis* Reut. by the largely pale second antennal segment and the more translucent hemelytra, but without a paler area at base of corium and clavus; the red color in cuneus and apex of embolium combined with the semi-translucent hemelytra give this species the aspect of a *Lepidopsallus*, but the antennal characters are those of *Rhinacloa*.

&. Length 2.6 mm., width 1.03 mm. Head: width .71 mm., vertex width at base .28 mm., width between eyes across frons .26 mm. Rostrum, length .90 mm., scarcely attaining posterior margins of intermediate coxae, yellowish, apex blackish. Antennae: segment I, length .143 mm., thickness .071 mm., black; II, .68 mm., thickness .086 mm., cylindrical, somewhat constricted at base, pale yellowish, apical one-third blackish, clothed with fine yellowish pubescence; III, .20 mm., slender, pale; IV, broken. Pronotum: length .43 mm., width at base .91 mm.

Head and body dark fuscous to black; hemelytra pale fuscous, semi-translucent, cuneus and apical area of embolium with hypodermal red; one specimen with hemelytra nearly entirely reddish; membrane uniformly light fusco-brownish, veins red about smaller areole, membrane sparsely clothed with silvery scale-like pubescence which appears to be a continuation of that on corium and cuneus. Legs black, front coxae, trochanters, and apices of front femora pale; tibiae pale, spines black with blackish spots at base; tarsi pale, apices fuscous. Dorsum, pleura, and sides of venter clothed with silvery scale-like pubescence and intermixed with brownish and black simple pubescence.

Q. Length 2.5 mm., width 1.03 mm. Head: width .64 mm., vertex .34 mm.; eyes much smaller than in the male. Antennae: segment I, length .13 mm., thickness .057 mm.; II, .53 mm., slender at base and rather distinctly clavate on apical one-third, thickness .072 mm., pale, the clavate portion blackish; III, .28 mm., slender, pale; IV, missing. Pronotum: length .41 mm., width at base .91 mm.

¹ Contribution from the Department of Zoology and Entomology, Iowa State College, Ames, Iowa.

Holotype: \$\(\), Nov. 18, 1924, Dunedin, Florida (W. S. Blatchley); author's collection. Allotype: \$\(\), Biscaine Bay, Florida (Mrs. A. T. Slosson); author's collection. Paratypes: \$\(\) \$\(\)\$, taken with allotype. \$\(\) \$\(\)\$, March 22, 1922, M. Haven, Florida (W. S. Blatchley).

A remarkable character of this species is the presence of silvery, scale-like pubescence on the wing membrane, which I have seen in no other Mirid. No doubt scales occur on the wing membrane of other species but the delicate nature of these deciduous scales would usually cause their loss when collecting the specimens.

The genus *Lepidopsallus* Knight appears to be closely allied to *Rhinacola* Reuter, but this latter genus may be separated by the thicker antennae of both sexes, antennal segment II of the female being rather distinctly clavate while in the male segment II is more cylindrical but greatly thickened, exceeding the thickness of segment I.

Lepidopsallus miniatus n. sp.

This species runs to *olseni* Kngt. in my key to the species of Lepidopsallus (Hemip. Conn., 1923, p. 470), but differs in the reddish color and relative length of antennal segment II; coloration suggestive of *rubidus* Uhler but the antennae uniformly pale and segment II distinctly longer; length of segment II distinctly greater than width of vertex plus dorsal width of an eye.

Q. Length 2.8 mm., width 1.5 mm. Head: width .77 mm., vertex .36 mm. Rostrum, length 1.06 mm., reaching to middle of posterior coxae, yellowish brown, basal and apical segments darker. Antennae: segment I, length .17 mm.; II, .69 mm.; III, .33 mm.; IV, .23 mm.; pale yellowish, the apical segment scarcely dusky. Pronotum: length .58 mm.,

width at base 1.23 mm.

Coloration reddish to reddish brown, nearly as in *rubidus* Uhler, calli darker, sometimes the pronotum and scutellum distinctly dark fuscous; one specimen very dark, the pronotum and scutellum ferruginous; cuneus uniformly translucent red, the corium and embolium of nearly the same shade; membrane fusco-brownish, veins becoming red. Legs reddish, front coxae fuscous at base, apices of femora and the tibiae pale; tibial spines dark, with fuscous spots at base but becoming obsolete on apical half; tarsi pale, fuscous only at extreme tips. Ventral surface yellowish to red, sternum fuscous to black. Clothed with silvery white scale-like pubes-

cence as in rubidus and intermixed with yellowish to fuscous

simple pubescence.

Holotype: Q, March 23, 1921, Dundedin, Florida (W. S. Blatchley); author's collection. Paratypes: Q, topotypic. Q, South Carolina (Mrs. A. T. Slosson).

Lepidopsallus ovatus n. sp.

Allied to *miniatus* but smaller, more ovate, and head broader, with antennae pale but relatively shorter; antennal segment II barely equal to width of vertex plus dorsal width

of an eye.

Q. Length 2.6 mm., width 1.55 mm. Head: width .77 mm., vertex .37 mm. Rostrum, length 1.03 mm., just attaining middle of hind coxae, yellowish, basal segment dark reddish, apical segment blackish. Antennae: segment I, length .143 mm.; II, .57 mm.; III, .32 mm.; IV, .23 mm.; uniformly pale yellowish, segment IV only slightly dusky; segment II just equal to vertex plus dorsal width of an eye. Pronotum: length .54 mm., width at base 1.16 mm.

General coloration reddish yellow, somewhat shining, hemelytra semi-translucent, pronotum piceous but basal angles more reddish, scutellum dark with lateral margins reddish yellow; head piceous, vertex pale bordering eyes; hemelytra reddish translucent, but becoming blackish on outer apical half of corium, cuneus uniformly reddish translucent; membrane uniformly pale fuscous, veins scarcely reddish. Ventral surface, coxae, and basal half of femora, piceous, shining; tibiae; tarsi, and apical one-fourth of femora pale, tibial spines black, fuscous points barely visible at base of spines on hind pair. Clothed with silvery white, scale-like pubescence, more thickly on pleura and sides of venter, intermixed on dorsum with simple yellowish pubescence.

Holotype: 9, May 3, 1924, Tucson, Arizona (A. A.

Nichol); author's collection.

Lepidopsallus pusillus n. sp.

This species runs to *olseni* Kngt. in my key to the species of the genus, but is readily distinguished by the yellowish ground color darkened with fuscous and the semi-translucent aspect of the hemelytra.

Q. Length 2.2 mm., width 1.03 mm. Head: width .63 mm., vertex .30 mm. Rostrum, length .85 mm., reaching to middle of hind coxae, yellowish, apex fuscous. Antennae: segment I, length .13 mm., yellowish; II, .51 mm., gradually

thickened toward apex where it equals thickness of segment I, blackish, the middle one-third yellowish; III, .31 mm., pale; IV, .23 mm., pale to dusky. Pronotum: length .41 mm., width at base .86 mm.

General coloration pale to yellowish and darkened with fuscous; head yellowish, vertex becoming infuscated; pronotum yellowish, the disk rather evenly infuscated except anterior margin and basal angles, scutellum dark fuscous; hemelytra pale yellowish translucent, inner half of corium and apical area of clavus pale fuscous, cuneus with apical half of membrane margin fuscous; membrane pale fumate, darker on veins. Ventral surface vellowish, becoming dusky on sternum and sides of venter. Legs pale, hind femora yellowish, anterior aspect showing many small, nearly obsolete fuscous dots, provided with a single subapical spine near dorsal margin which in length equals the tibial spines; tibial spines black, prominent, those on basal half set with fuscous dot at base of each. Clothed with rather prominent fuscous, simple pubescence, and sparsely intermixed on dorsum with silvery scale-like pubescence.

3. Length 2.4 mm., width 1 mm. Head: width .68 mm., vertex .26 mm. Antennae: segment I, length .16 mm., yellowish; II, .67 mm., yellowish, apical one-third fuscous, clothed with fine fuscous pubescence, a few fine hairs in length equaling thickness of segment; III, .29 mm., dusky; IV, .20 mm., dusky. General form more slender than the

female but coloration very similar.

Holotype: Q, July 4, 1918, Gainesville, Florida (C. J. Drake); author's collection. Allotype: &, Dec. 15, 1913, Dunedin, Florida (W. S. Blatchley); author's collection. Paratypes: Q, Dec. 17, 1920, 4 Q, Nov. 19, 1924, Dunedin; &, April 6, 1925, Royal Palm Park, Florida (W. S. Blatchley).

Note on Pieris rapae and Brephos infans.—A male *P. rapae* was taken by me in Fall River on March 21, 1925, which is rather an early appearance for southern New England. I have never seen it on the wing before April on previous seasons of which I have record. Male *Brephos infans* started appearing in numbers in the last week in April. Two males were taken on March 22.—W. Prescott Rogers, Fall River, Mass.